<u>RAW SEQUENCE LISTING</u>

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) no errors detected.

Application Serial Number: 10,591,550

Source: IFWP

Date Processed by STIC: 9/15/06

ENTERED

IFWP

```
 3 <110> APPLICANT: Song, Hee-Sook
 4        Roche, Christina
 5        Morra, Marc
 6        Dammann, Christian
 7        Jensen, Timothy
 8        Dobson, Alleson
10 <120> TITLE OF INVENTION: TRANSGENIC EXPRESSION CONSTRUCTS FOR VEGETATIVE PLANT TISSUE
11        SPECIFIC EXPRESSION OF NUCLEIC ACIDS
13 <130> FILE REFERENCE: 13987-00021-US
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C--> 15 **<140> CURRENT APPLICATION NUMBER: US/10/591,550**
C--> 15 **<141> CURRENT FILING DATE: 2006-09-01**
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15 <150> PRIOR APPLICATION NUMBER: PCT/EP2005/002052
16 <151> PRIOR FILING DATE: 2005-02-26
18 <150> PRIOR APPLICATION NUMBER: US 60/548911
19 <151> PRIOR FILING DATE: 2004-03-01
21 <150> PRIOR APPLICATION NUMBER: US 60/591452
22 <151> PRIOR FILING DATE: 2004-07-27
24 <160> NUMBER OF SEQ ID NOS: 19
26 <170> SOFTWARE: PatentIn version 3.3
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29 <211> LENGTH: 863
30 <212> TYPE: DNA
31 <213> ORGANISM: Pisum sativum
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34 <221> NAME/KEY: promoter
35 <222> LOCATION: (1)..(863)
36 <223> OTHER INFORMATION: promoter region of ptxA gene including 5'-untranslated region
38 <220> FEATURE:
39 <221> NAME/KEY: misc_feature
40 <222> LOCATION: (300)..(583)
41 <223> OTHER INFORMATION: potential core region of the promoter comprising clusters of
42        promoter elements
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RAW SEQUENCE LISTING   DATE: 09/15/2006
PATENT APPLICATION: US/10/591,550   TIME: 09:18:47

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Output Set: **N:\CRF4\09152006\J591550.raw**

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 59 taaaatcata gttgtcaatt acatactcaa tcaagtccct ttcttttacc caataaacat      240
 60 caacatattg cttcttccat taagcatata aacatcaaag tctaaaacta gcaaaatgtt      300
 61 gtttttagga tgacacattt catacatagt ttaaaagata cttgattcga ttacaaaaag      360
 62 aaattaccaa tagtttagca caaagtctaa agcataatta aagcatcaca tgtgcagatt      420
 63 tatgaaaaaa agattaagat tgcccctttc atcacgggtc gaataatagc actacttgtc      480
 64 actacatgtt aaaaaaatgt cctctagtac atcaaacttt ttccattgat tccccttatc      540
 65 catgaaaaaa ataaacaaat tcttaagaca caaaaaaatg gccccacatc cttttttctg      600
 66 gcctagtttg tttgaattca ttctaactct tgaatatgta acgaggccca ctaaaaatca      660
 67 atcaatgatt taacataaaa aatgaatagt ttaattccaa tttgctgcaa catggtccgt      720
 68 gaatatgact cacgagaaag atatatcaaa atatcaaaat ttcatagttt ttttcaccat      780
 69 ataaacctca tcactcattc tattttttta agtgcaaagc ttcatagtag tgagcacaca      840
 70 cattacacta aaatcttcga aac                                             863
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 74 <212> TYPE: DNA
 75 <213> ORGANISM: Glycine max
 77 <220> FEATURE:
 78 <221> NAME/KEY: promoter
 79 <222> LOCATION: (1)..(1380)
 80 <223> OTHER INFORMATION: promoter region of SbHRGP3 gene including 5' untranslated
region
 82 <220> FEATURE:
 83 <221> NAME/KEY: misc_feature
 84 <222> LOCATION: (800)..(1179)
 85 <223> OTHER INFORMATION: potential core region of the promoter comprising clusters of
 86       promoter elements
 88 <220> FEATURE:
 89 <221> NAME/KEY: TATA_signal
 90 <222> LOCATION: (1147)..(1152)
 91 <223> OTHER INFORMATION: TATA signal
 93 <220> FEATURE:
 94 <221> NAME/KEY: 5'UTR
 95 <222> LOCATION: (1180)..(1380)
 96 <223> OTHER INFORMATION: potential 5' UTR
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100 taaccgtatt aaaatgctga atgatgtata tatgtgggtt caaattacat aatttgtaag      120
101 tatgttacac attgtataaa tatgtttag agaaaaatgt aaacttatat gtctaaagtt      180
102 ataaaagaaa catgtccaac acatttcagt taagatttaa atagtataaa ttaaaaatta      240
103 tcgatgatga caaaaaattg taaatataat tcattttaaa aaaagttaag aaattgaaaa      300
104 aggaaatatc gagaaaaaaa tatgtcgatt atatatatgt gtgagctgag tgaatatata      360
105 tgtatatttt attttgact gaatatatgt gtgtatagac aataatgcgc agaatgccga      420
106 tcgatgaatt gtttactgca tttccaaata tgtgtgcata agcgttccac atgtcaccca      480
107 tgttgtaatt agtttcttcc ctggatgaat tactaagaaa cagattgatt gatagtacta      540
108 tattaaatta tgtagcttta catgtcagga aaatgtagtt gcagtattat gtaatgtaat      600
109 taataggaag tcacagacaa tttgaagaca atttctttag cttacctatc tcatgccaca      660
110 attatgtact tacgacagta aaatgtttaa aagcaaaaaa agaaagaag aagaagaagt      720
111 aataaatgga attatataga atgtactctt tgtcttcatc tgccctataa ttcctgcagc      780
112 agccaaagca taatagcatg caatatgcac atattcgttt taggctttta gcctccacga      840
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115 ttgctataga atcaaaaaat gaagagatgt gacaaattgt tacatctaat acgcaataat   1020
116 ttgacaaaga cgactatgcg tttatatatt tattttaatt agttggcgtc tcttattata   1080
117 aagaaaataa gggcagtgtc aacatttcca ggcaactagt tagttatttt attttcttgt   1140
118 ttataattat ttccatatag ctagctgtct ctatctaatc caaatccgct ttccacaacc   1200
119 aacttggtcg cattggtcca aaaaactcaa tatcaatatt ttcgaaatag ttttagcatt   1260
120 gtttaggaag agaattgtaa gagataaaat ctaagtactc cacctaccaa gataaaatag   1320
121 ttggataaat gggtaaaaaa agttgtataa agggcaacac tacctctcct aatggcagta   1380
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124 <211> LENGTH: 26
125 <212> TYPE: DNA
126 <213> ORGANISM: Artificial
128 <220> FEATURE:
129 <223> OTHER INFORMATION: Oligonucleotide primer ptxA5'
131 <400> SEQUENCE: 3
132 ggcgcgcccg caatttttg tgaagc                                           26
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135 <211> LENGTH: 25
136 <212> TYPE: DNA
137 <213> ORGANISM: Artificial
139 <220> FEATURE:
140 <223> OTHER INFORMATION: Oligonucleotide primer ptxA3'
142 <400> SEQUENCE: 4
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146 <211> LENGTH: 29
147 <212> TYPE: DNA
148 <213> ORGANISM: Artificial
150 <220> FEATURE:
151 <223> OTHER INFORMATION: Oligonucleotide primer SbHRGP3-5'
153 <400> SEQUENCE: 5
154 tctagataga agcttttcaa caatcatgc                                      29
156 <210> SEQ ID NO: 6
157 <211> LENGTH: 24
158 <212> TYPE: DNA
159 <213> ORGANISM: Artificial
161 <220> FEATURE:
162 <223> OTHER INFORMATION: Oligonucleotide primer SbHRGP3-3'
164 <400> SEQUENCE: 6
165 agatcttact gccattagga gagg                                           24
167 <210> SEQ ID NO: 7
168 <211> LENGTH: 1381
169 <212> TYPE: DNA
170 <213> ORGANISM: Glycine max
172 <220> FEATURE:
173 <221> NAME/KEY: promoter
174 <222> LOCATION: (1)..(1368)
175 <223> OTHER INFORMATION: promoter
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RAW SEQUENCE LISTING   DATE: 09/15/2006
PATENT APPLICATION: **US/10/591,550**   TIME: 09:18:47

Input Set : **A:\Sequence Listing - 13987-00021-US.txt**
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177 <220> FEATURE:
178 <221> NAME/KEY: misc_feature
179 <222> LOCATION: (801)..(1178)
180 <223> OTHER INFORMATION: potential core region of promoter
182 <220> FEATURE:
183 <221> NAME/KEY: TATA_signal
184 <222> LOCATION: (1146)..(1151)
185 <223> OTHER INFORMATION: TATA signal
187 <220> FEATURE:
188 <221> NAME/KEY: 5'UTR
189 <222> LOCATION: (1369)..(1381)
190 <223> OTHER INFORMATION: 5' untranslated region
194 <400> SEQUENCE: 7
195 aagcttttca acaatcatgc ccatgtcaag tgtaaaacag gtttacctct cttaaataac      60
196 cgtattaaaa tgctgaatga tgtatatatg tgggttcaaa ttacataatt tgtaagtatg     120
197 ttacacattg tataaatatg ttttagagaa aaatgtaaac ttatatgtct aaagttataa     180
198 aagaaacatg tccaacacat ttcagttaag atttaaatag tataattaaa aattatcgat     240
199 gatgacaaaa aattgtaaat ataattcatt ttaaaaaag ttaagaaatt gaaaaaggaa      300
200 atatcgagaa aaaatatgt cgattatata tatgtgtgag ctgagtgaat atatatgtat      360
201 attttatttt tgactgaata tatgtgtgta tagacaataa tgcgcagaat gccgatcgat     420
202 gaattgttta ctgcatttcc aaatatgtgt gcataagcgt tccacatgtc acccatgttg     480
203 taattagttt cttccctgga tgaattacta agaaacagat tgattgatag tactatatta     540
204 aattatgtag ctttacatgt caggaaaatg tagttgcagt attatgtaat gtaattaata     600
205 ggaagtcaca gacaatttga agacaatttc tttagcttac ctatctcatg ccacaattat     660
206 gtacttacga cagtaaaatg tttaaaagca aaagcaaaaa aaagaaagaa gaagaagaag     720
207 taataaatgg aattatatag aatgtactct ttgtcttcat ctgccctata attcctgcag     780
208 cagccaaagc ataatagcat gcaatatgca catattcgtt ttaggctttt agctccacga     840
209 tctgttaatg gaaagtgaaa agtaagagat atgaagttca ttatggcagc catggtccca     900
210 gggaagcact agaagatatg aaatgactaa aaggtcacca tgcataatgc tttaaatgct     960
211 tgctatagaa tcaaaaaatg aagagatgtg acaaattgtt acatctaata cgcaataatt    1020
212 tgacaaagac gactatgcgt ttatatattt attttaatta gttggcgtct cttattataa    1080
213 agaaaataag ggcagtgtca acatttccag gcaactagtt agttatttta ttttcttgtt    1140
214 tataattatt tccatatagc tagctgtctc tatctaatcc aaatccgcgt tccacaacca    1200
215 acttggtcca aaaaactcaa tatcaatatt ttcaaaatag ttttagcatt gtttaggaag    1260
216 agaattgtaa gagataaaat ctaagtactc cacctaccaa gataaaatag ttggataaat    1320
217 gggtaaaaaa gttgtataaa gggcaacact acctctccta atggcagtac caaaacccaa    1380
218 g                                                                    1381
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221 <211> LENGTH: 1388
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223 <213> ORGANISM: Glycine max
225 <220> FEATURE:
226 <221> NAME/KEY: promoter
227 <222> LOCATION: (1)..(1175)
228 <223> OTHER INFORMATION: potential promoter region
230 <220> FEATURE:
231 <221> NAME/KEY: misc_feature
232 <222> LOCATION: (796)..(1175)
233 <223> OTHER INFORMATION: potential core region of promoter
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RAW SEQUENCE LISTING   DATE: 09/15/2006
PATENT APPLICATION: US/10/591,550   TIME: 09:18:47

Input Set : **A:\Sequence Listing - 13987-00021-US.txt**
Output Set: **N:\CRF4\09152006\J591550.raw**

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235 <220> FEATURE:
236 <221> NAME/KEY: TATA_signal
237 <222> LOCATION: (1143)..(1148)
238 <223> OTHER INFORMATION: TATA signal
240 <220> FEATURE:
241 <221> NAME/KEY: 5'UTR
242 <222> LOCATION: (1176)..(1388)
243 <223> OTHER INFORMATION: 5' untranslated region
246 <400> SEQUENCE: 8
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248 cgtattaaaa tgctgaatga tgtatatatg tgggttcaaa ttacataatt tgtaagtatg  120
249 ttacacattg tataaatatg ttttagagaa aaatgtaaac ttatatgtct aaagttataa  180
250 aagaaacatg tccaacacat ttcagttaag atttaaatag tataaattaa aaattatcga  240
251 tgatgacaaa aaattgtaaa tataattcat tttaaaaaaa gttaagaaat tgaaaaagga  300
252 aatatcgaga aaaaaatatg tcgattatat atatgtgtga gctgagtgaa tatatatgta  360
253 tattttattt ttgactgaat atatgtgtgt atagacaata atgcgcagaa tgccgatcga  420
254 tgaattgttt actgcatttc caaatatgtg tgcataagcg ttccacatgt cacccatgtt  480
255 gtaattagtt tcttccctgg atgaattact aagaaacaga ttgattgata gtactatatt  540
256 aaattatgta gctttacatg tcaggaaaat gtagttgcag tattatgtaa tgtaattaat  600
257 aggaagtcac agacaatttg aagacaattt ctttagctta cctatctcat gccacaatta  660
258 tgtacttacg acagtaaaat gtttaaaagc aaaaaaaaga aagaagaaga agaagtaata  720
259 aatggaatta tatagaatgt actctttgtc ttcatctgcc ctataattcc tgcagcagcc  780
260 aaagcataat agcatgcaat atgcacatat tcgtttagg cttttagcct ccacgatctg   840
261 ttaatggaaa gtgaaaagta agagatatga agttcattat ggcagccatg gtcccaggga  900
262 agcactagaa gatatgaaat gacataaaag gtcaccatgc ataatgcttt aaatgcttgc  960
263 tatagaatca aaaaatgaag agatgtgaca aattgttaca tctaatacgc aataatttga 1020
264 caaagacgac tatgcgttta tatatttatt ttaattagtt ggcgtctctt attataaaga 1080
265 aaataagggc agtgtcaaca tttccaggca actagttagt tattttattt tcttgtttat 1140
266 aattatttcc atatagctag ctgtctctat ctaatccaaa tccgctttcc acaaccaact 1200
267 tggtcgcatt ggtccaaaaa actcaatatc aatattttcg aaatagtttt agcattgttt 1260
268 aggaagagaa ttgtaagaga taaaatctaa gtactccacc taccaagata aaatagttgg 1320
269 ataaatgggt aaaaaaagtt gtataaaggg caacactacc tctcctaatg gcagtaccaa 1380
270 aacccaag                                                          1388
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273 <211> LENGTH: 1373
274 <212> TYPE: DNA
275 <213> ORGANISM: Glycine max
277 <220> FEATURE:
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279 <222> LOCATION: (1)..(1172)
280 <223> OTHER INFORMATION: potential promoter region
282 <220> FEATURE:
283 <221> NAME/KEY: misc_feature
284 <222> LOCATION: (793)..(1172)
285 <223> OTHER INFORMATION: potential core region of promoter
287 <220> FEATURE:
288 <221> NAME/KEY: TATA_signal
289 <222> LOCATION: (1140)..(1145)
290 <223> OTHER INFORMATION: TATA signal
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RAW SEQUENCE LISTING ERROR SUMMARY   DATE: 09/15/2006
PATENT APPLICATION: **US/10/591,550**   TIME: 09:18:48

Input Set : **A:\Sequence Listing - 13987-00021-US.txt**
Output Set: **N:\CRF4\09152006\J591550.raw**

<u>**Invalid <213> Response:**</u>
Use of "Artificial" only as "<213> Organism" response is incomplete,
per 1.823(b) of New Sequence Rules. Valid response is Artificial Sequence.

Seq#:3,4,5,6,10,11,12,13,14,15,16,17,18,19

VERIFICATION SUMMARY   DATE: 09/15/2006
PATENT APPLICATION: **US/10/591,550**   TIME: 09:18:48

Input Set : **A:\Sequence Listing - 13987-00021-US.txt**
Output Set: **N:\CRF4\09152006\J591550.raw**

L:15 M:270 C: Current Application Number differs, Replaced Current Application No
L:15 M:271 C: Current Filing Date differs, Replaced Current Filing Date